

Dibaeis absoluta, a crustose lichen that is turning heads on tracks around the country.

Mr Jon Terry¹, Ms Allison Knight², Ms Anna Harris³, Dr Lars Ludwig²

¹Jon Terry Ecology, ²University of Otago, ³Department of Conservation

Lichens offer a fascinating example of a cross-kingdom symbiosis; they evolved as rugged and adaptable partnerships between a fungus and a green alga or a cyanobacterium (or both). In New Zealand, 54% of the 1800 lichens so far recorded are classified as Data Deficient, meaning we know so little about them that we cannot ascribe to them a meaningful threat classification, and conservation decisions cannot be made. This is the highest percentage of Data Deficient species among all plant groups in the NZ Threat Classification System.

It reflects both the difficulty of lichen identification and the current shortage of experienced lichenologists in Aotearoa/New Zealand. Lichens play a pivotal role in nearly every ecosystem on earth and New Zealand's lichen biodiversity is particularly rich – we harbour 10% of the world's lichen flora on 0.18% of the global land mass.

Our aim is to shed light on the 975 New Zealand lichen species that remain under-researched. We will start with some of the Data Deficient lichens that appear to be common and widespread; species that are reasonably easy to identify unambiguously and for which specimens already exist in national herbaria.

The crustose lichen *Dibaeis absoluta* was chosen as our first candidate. It grows on track sides and other disturbed ground and is a striking colour mix, with a moss green thallus and marshmallow pink apothecia (spore bodies).

Over the last year we have gathered from herbaria, personal observations and photographs sent in from Botanical Societies and interested individuals or posted on NatureWatch. These photos and specimens have been confirmed by trained lichenologists. Our collated observations show that *Dibaeis absoluta* actually does have a widespread distribution and is indeed fairly common. These results should lead to a revised threat classification that more accurately reflects its Conservation Status.